

Express Mail No.: EL 452 482 689 US

<p style="text-align: center;">LIST OF REFERENCES CITED BY APPLICANT</p> <p style="text-align: center;">(Use several sheets if necessary)</p>				ATTY DOCKET NO 11090-003-999		APPLICATION NO 09/452,749	
				APPLICANT Zagoskin		FILING DATE December 2, 1999	
PATENT DOCUMENTS							
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
PA	AA	3,953,749	12/2/74	Baechtold et al.	307	277	
	AB	5,157,466	10/20/92	Char et al.	3357	5	
	AC	5,274,249	12/28/93	Xi et al.	257	39	
	AD	5,560,836	10/01/96	Nagaishi	216	3	
	AE	5,571,778	11/05/96	Fujimoto et al.	505	329	
	AF	5,694,059	12/02/97	Wada et al.	326	62	
	AG	5,710,051	01/20/98	Park et al.	438	149	
	AH	5,767,043	06/16/98	Cantor et al.	505	162	
	AI	5,768,297	05/06/98	Shor	371	40.11	
	AJ	5,838,021	11/17/98	Ancona	257	30	
	AK	5,844,279	12/01/98	Tanamoto et al.	257	347	
	AL	5,883,051	03/16/99	Ishimaru et al.	505	190	
	AM	5,917,322	06/29/99	Gershenfeld et al.	324	307	
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)							
	AN	D. Agterberg, and M. Sigrist, "Asymmetric magnetic interference patterns in 0-n Josephson junctions", LANL preprint cond-mat/9711157 (November 17, 1997).					
	AO	Ahn, C. H. et al., "Electrostatic Modulation of Superconductivity in Ultrathin GdBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-x</sub> Films", Science, Vol. 284, pp. 1152-1155, (May 14, 1999).					
	AP	L. Alff, H. Takashima, S. Kashiwaya, N. Terada, T. Ito, K. Oka, Y. Tanaka, and M. Kayanagi, "Orientation Dependence of Tunneling Spectra in YBCO and NCCO", Proc. of M <sup>2</sup> S-HTSC-V, Feb/Mar, 1997 Beijing, China.					
	AQ	N. Allsopp, J. Sanchez Canizares, R. Raimondi, and C. Lambert, "Giant Conductance Oscillations In Mesoscopic Andreev Interferometers", LANL preprint cond-mat/9504113 (April 1995).					
	AR	A. Altland, B. Simons, and D. Taras-Semchuk, "Field theory of mesoscopic fluctuations in superconductor/normal-metal systems", JETP Lett., 67, 22 (January 1998).					
	AS	B.L. Altshuler et al. eds., <i>Mesoscopic Phenomenon Solids</i> , (North-Holland 1991) [Preface only].					
	AT	N. Argaman, "Non-equilibrium Josephson-like effects in mesoscopic S-N-S junctions", LANL preprint cond-mat/9709001 (August 29, 1997).					
EXAMINER <i>Royce A. Will</i>				DATE CONSIDERED <i>7 May 02</i>			

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DLG	AU	5,997,958	12/07/99	Sato et al.	427	468	
	AV	6,010,934	01/04/00	Wu	438	264	
	AW	6,016,433	01/18/00	Mizuno et al.	505	190	
	AX	6,060,723	05/09/00	Nakazato et al.	257	315	
	AY	6,069,380	05/30/00	Chou et al.	257	315	
	AZ	6,169,308	01/02/01	Sunami et al.	257	321	
	BA	6,204,517	03/20/01	Wu	257	51	
	BB	6,211,013	04/03/01	Park et al.	438	257	
	BC	6,301,029	10/09/01	Azuma	359	107	

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							YES	NO

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BD	Ashcroft and Mermin, "Condensed Matter Physics", pp. 726-753 (Saunders College Publishing, 1976).
BE	(Author Unknown), "Definition of mesoscopic", <a href="http://physics.about.com/library/dict/bldefmesoscopic.htm">http://physics.about.com/library/dict/bldefmesoscopic.htm</a> , About.com Inc. (2001). Accessed on date unknown
BF	D. V. Averin, A. N. Korotkov, A. J. Manninen, and J. P. Pekola, "Resonant Tunneling through a Macroscopic Charge State in a Superconducting Single Electron Transistor", Phys. Rev. Lett. 78, pp. 4821-4824 (1997).
BG	P. Bagwell, "Suppression of the Josephson current through a narrow, mesoscopic, semiconductor channel by a single impurity", Phys. Rev. B, 46:19, 12573-12586 (November 15, 1992).
BH	Y. Barash, A. Galaktionov, and A. Zaikin, "Charge transport in junctions between d-wave superconductors", Phys. Rev. B, 52:1, 665-682 (July 1, 1995).
BI	Y. Barash, H. Burkhardt, and D. Rainer, "Low-Temperature Anomaly in the Josephson Critical Current of Junctions in d-Wave Superconductors", Phys. Rev. Lett., 77:19, 4070-4073 (November 4, 1996).
BJ	Y. Barash, "Quasiparticle Interface States in Junctions Involving d-wave Superconductors", LANL preprint cond-mat/9907277 (July 19, 1999).
BK	J. Bardeen, and J. Johnson, "Josephson Current Flow in Pure Superconducting-Normal-Superconducting Junctions", Phys. Rev. B, 5:1, 72-78 (January 1, 1972).
BL	Adriano Barenco, Todd A. Brun et al., "Effects of noise on quantum error correction algorithms", LANL preprint quant-ph/9612047 (December 18, 1996).
BM	A. Barenco et al., "Elementary gates for Quantum Computation", Phys. Rev. A 52, pp.3457-3467 (1995).

EXAMINER

Cecilia W. Little

DATE CONSIDERED

7 May 02

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De	BN	6,317,766	11/13/01	Grover	708	400	

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							YES	NO

## OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	BO	A. Barone and G. Paterno, "Physics and Applications of the Josephson Effect", John Wiley & Sons, New York, (1982) [Hard Copy Chapter 1 Only].
	BP	V. Barzykin, and A. Zagorskin, "Coherent transport and nonlocality in mesoscopic SNS junctions: anomalous magnetic interference patterns", LANL preprint cond-mat/9805104 (November 16, 1998).
	BQ	David Beckman, Amalavoyal N. Chari et al., "Efficient networks for quantum factoring", LANL preprint quant-ph/9602016 (February 21, 1996).
	BR	C. Beenakker, J.A. Melsen, and P.W. Brouwer, "Giant backscattering in angle-resolved Andreev reflection", LANL preprint cond-mat/9501003 (January 3, 1995).
	BS	P. Benioff, "Quantum Robots Plus Environments", LANL preprint quant-ph/9807032 (1998).
	BT	G. P. Berman, A. R. Bishop, G. D. Doolen, G. V. Lopez, V. I. Tsifrinovich, "Influence of Non-Resonant Effects on the Dynamics of Quantum Logic Gates at Room Temperature", LANL preprint quant-ph/9906109 (1999).
	BU	M. Biskup, P. Cejnar and R. Kotecky, "Decoherence and Efficiency of Quantum Error Correction", LANL preprint quant-ph/9608010 (April 7, 1997).
	BV	M. Blaauboer, R. Koperdraad, A. Lodder, and D. Lenstra, "Size-effects in the Density of States in NS and DND junctions", LANL preprint cond-mat/9605078 (May 13, 1996).
	BW	Alexandre Blais and Alexandre M. Zagorskin, "Operation of universal gates in a solid state quantum computer based on clean Josephson junctions between d-wave superconductors", LANL preprint quant-ph/9905043 (1999).
	BX	G. Blonder, M. Tinkham, and T. Klapwijk, "Transition from metallic to tunneling regimes in superconducting microconstrictions: Excess current, charge imbalance and supercurrent conversion", Phys. Rev. B, 25:7, 4515-4532 (April 1, 1982).
	BY	M. Bocko, A. Herr and M. Feldman, "Prospect for Quantum Coherent Computation Using Superconducting Electronics", IEEE Trans. App. Sup. 7, 3638 (1997).

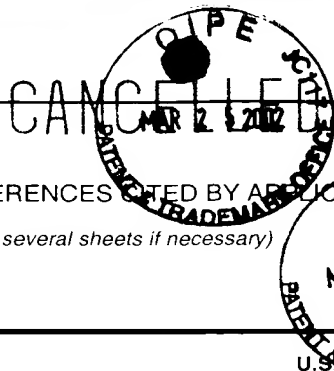
EXAMINER

Dorothy A. Vile

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7 May 02

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BZ	N.H. Bonadeo et al., "Coherent Optical Control of the Quantum State of a Single Quantum Dot", Science, 5395:282, 1473 (November 20, 1998).
CA	S. Bose, P.L. Knight et al., "Implementations of Quantum Logic: Fundamental and Experimental Limits", LANL preprint quant-ph/9712021 (December 10, 1997).
CB	D. Aharonov and M. Ben-Or, "Fault-Tolerant Quantum Computation With Constant Error", LANL preprint quant-ph/9611025 (November 15, 1996).
CC	D. Bouwmeester, A. Eckert, and A. Zeilinger, eds., The Physics of Quantum Information, p. 97 (Springer, 2001).
CD	Samuel L. Braunstein, "Quantum error correction of dephasing in 3 qubits", LANL preprint quant-ph/9603024 (March 19, 1996).
CE	Samuel L. Braunstein and John A. Smolin, "Perfect quantum error correction coding in 24 laser pulses", LANL preprint quant-ph/9604036 (October 22, 1996).
CF	H.J. Briegel et al., "Quantum communication and the creation of maximally entangled pairs of atoms over a noisy channel", LANL preprint quant-ph/9712027 (December 11, 1997).
CG	H.J. Briegel, W. Dur et al., "Quantum repeaters for communication", LANL preprint quant-ph/9803056 (March 20, 1998).
CH	C. Bruder, A. van Otterlo and G.T. Zimanyi, "Tunnel junctions of unconventional superconductors", Phys. Rev. B, 51:18, 12904-12907 (May 1, 1995).
CI	Dagmar Bruss, "Optimal eavesdropping in quantum cryptography with six states", LANL preprint quant-ph/9805019 (October 8, 1998).
CJ	Dagmar Bruss, Artur Ekert and Chiara Macchiavello, "Optimal universal quantum cloning and state estimation", LANL preprint quant-ph/9712019 (October 8, 1998).
CK	V. Buzek and M. Hillery, "Universal Optimal Cloning of Qubits and Quantum Registers", LANL preprint quant-ph/9801009 (January 7, 1998).

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<div style="position: relative; height: 100px;"> <div style="position: absolute; top: 0; left: 0; width: 100%; text-align: center;"> <p style="margin: 0;">O I P E</p> <p style="font-size: 2em; font-weight: bold; margin: 0;">CANCELLED</p> <p style="margin: 0;">MAR 2 5 2002</p> <p style="font-size: 0.8em;">U.S. PATENT &amp; TRADEMARK OFFICE</p> </div> <div style="position: absolute; bottom: 0; right: 0; width: 100%; text-align: center;"> <p style="margin: 0;">O I P E</p> <p style="font-size: 2em; font-weight: bold; margin: 0;">CANCELLED</p> <p style="margin: 0;">MAR 2 6 2002</p> <p style="font-size: 0.8em;">U.S. PATENT &amp; TRADEMARK OFFICE</p> </div> </div>				ATTY DOCKET NO		APPLICATION NO	
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Df	CL	V. Buzek, S.L. Braunstein et al., "Quantum copying: A network", LANL preprint quant-ph/9703046 (March 24, 1997).					
	CM	A.R. Calderbank, E.M. Rains et al., "Quantum Error Correction Via Codes Over GF(4)", LANL preprint quant-ph/9608006 (September 10, 1997).					
	CN	A.R. Calderbank, E.M. Rains et al., "Quantum Error Correction and Orthogonal Geometry", LANL preprint quant-ph/9605005 (July 2, 1996).					
	CO	A.R. Calderbank and Peter W. Shor, "Good quantum error-correcting codes exist", LANL preprint quant-ph/9512032 (April 16, 1996).					
	CP	P. Carruthers, and M. Nieto, "Phase and Angle Variables in Quantum Mechanics", Rev. Mod. Phys., 40, 411-440 (April 1968).					
	CQ	Li-Fu Chang, and P. Bagwell, "Ballistic Josephson-current flow through an asymmetric superconductor-normal-metal-superconductor junction", Phys. Rev. B., 49:22, 15853-15863 (June 1, 1994).					
	CR	H.F. Chau, "Five Quantum Register Error Correction Code For Higher Spin Systems", LANL preprint quant-ph/9702033 (May 19, 1997).					
	CS	H. F. Chau, "Good Quantum Convolutional Error Correction Codes and Their Decoding Algorithm Exist", LANL preprint quant-ph/9806032 (1998).					
	CT	H. F. Chau, "Quantum Convolutional Error Correction Codes", LANL preprint quant-ph/9802009 (1998).					
	CU	P. Chaudhari, et al., "The Microstructure of High-Critical Current Superconducting Films", Science 238:4825, pp. 342-344 (1987).					
	CV	P. Chaudhari, et al., "Direct Measurement of the superconducting properties of single grain boundaries in YBa2Cu3O7- delta", Phys. Rev. Lett. 60, p.1653 (1988).					
	CW	A. Chrestin, T. Matsuyama and U. Merkt, "Evidence for a proximity-induced energy gap in Nb/InAs/Nb junctions", Physical Review B, 55:13, 8457-8465 (April 1, 1997).					
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Coughlin Little				7 May 02			
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CX	Isaac L. Chuang and R. Laflamme, "Quantum Error Correction by Coding", LANL preprint quant-ph/9511003 (November 3, 1995).
CY	Isaac L. Chuang and Yoshihisa Yamamoto, "A Simple Quantum Computer", LANL preprint quant-ph/9505011 (May 22, 1995).
CZ	Isaac L. Chuang and Yoshihisa Yamamoto, "The Persistent Quantum Bit", LANL preprint quant-ph/9604030 (April 25, 1996).
DA	I. L. Chuang, N. Gershenfeld, and M. Kubinec, "Experimental Implementation of Fast Quantum Searching", Phys. Rev. Lett., 80:15, 3408-3411 (April 13, 1998).
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DC	Daniel Clery, "New clues to superconductivity", Science, 265:5174, 860 (August 12, 1994).
DD	Richard Cleve and Daniel Gottesman, "Efficient Computations of Encodings for Quantum Error Correction", LANL preprint quant-ph/9607030 (July 31, 1996).
DE	Richard Cleve and David P. DiVincenzo, "Schumacher's quantum data compression as a quantum computation", LANL preprint quant-ph/9603009 (March 7, 1996).
DF	David Collins, K. W. Kim, W. C. Hoon, "Deutsch-Jozsa Algorithm as a test of Quantum Computation", LANL preprint quant-ph/9807012 (1998).
DG	Douglas M. Considine, "Van Nostrand's Scientific Encyclopedia", 7th edition, Douglas M. Considine et al., eds., New York.
DH	K. Constantinian, G. Ovsyannikov, A. Mashtakov, J. Ramos, Z. Ivanov, J. Mygind, and N. Pederson, "Microwave dynamics of YBCO bi-epitaxial Josephson structures", Physica C, 273, 21 (1996).
DI	R. De Bruyn Ouboter & A.N. Omelyanchouk, "Macroscopic quantum interference effects in superconducting multiterminal microstructures", Superlattices and Microstructures, 25:5/6, 1005-1017 (1999).

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Douglas W. Little

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<i>Defec</i>	DJ	R. De Bruyn Ouboter and A.N. Omelyanchouk, "Four-terminal SQUID: Magnetic Flux Switching in Bistable State and Noise", LANL preprint cond-mat/9805109 (May 9, 1998).
	DK	H. De Raedt, K. Michielsen, and T. Klapwijk, "Andreev reflection in nanoscale metal-superconductor devices", Phys. Rev. B, 50:1, 631-634 (July 1, 1994).
	DL	R. Derka, V. Buzek and A.K. Ekert, "Universal Algorithm for Optimal Estimation of Quantum States from Finite Ensembles", LANL preprint quant-ph/9707028 (July 16, 1997).
	DM	D. Deutsch, "Quantum Theory, the Church-Turing Principle and the Universal Quantum computer," Proc. of the R. Soc. Of London A 400, pp. 97-117 (1985).
	DN	David Deutsch, Artur Ekert et al., "Quantum privacy amplification and the security of quantum cryptography over noisy channels", LANL preprint quant-ph/9604039 (April 30, 1996).
	DO	T. Devereaux, and P. Fulde, "Multiple Andreev scattering in superconductor-normal metal-superconductor junctions as a test for anisotropic electron pairing", Phys. Rev. B, 47:21, 14638-14641 (June 1, 1993).
	DP	C. D'Helon and G.J. Milburn, "Correcting the effects of spontaneous emission on cold-trapped ions", LANL preprint quant-ph/9610031 (May 19, 1997).
	DQ	C. D'Helon, G. J. Milburn, "Quantum Measurements with a Quantum Computer", LANL preprint quant-ph/9705014 (1997).
	DR	D. Dimos, et al. "Orientation dependence of grain-boundary critical currents in YBa2Cu3O7 - delta bicrystals", Phys. Rev. Lett. 61, 219 (1988).
	DS	D. P. DiVincenzo, and D. Loss, "Quantum Computers and Quantum Coherence", LANL preprint cond-mat/9901137 (1999).
	DT	D. DiVincenzo, "Quantum Computing and Single-Qubit Measurements Using the Spin Filter Effect", LANL preprint cond-mat/9810295 v1, (22 October, 1998).
	DU	D. DiVincenzo, "Quantum Computation", Science, 279, 5234 (Jan. 16, 1998).

EXAMINER

*Douglas Will*

DATE CONSIDERED

*7 May 02*

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Pile	DV	David P. DiVincenzo and Peter W. Shor, "Fault-Tolerant Error Correction with Efficient Quantum Codes", LANL preprint quant-ph/9605031 (Aug. 23, 1996).						
	DW	Lu-Ming Duan and Guang-Can Guo, "Optimal quantum codes for preventing collective amplitude damping" LANL preprint quant-ph/ 9804014 (April 6, 1998).						
	DX	Lu-Ming Duan and Guang-Can Guo, "Preserving coherence in quantum computation by pairing the quantum bits", LANL preprint quant-ph/9703040 (Oct. 3, 1997).						
	DY	Lu-Ming Duan and Guang-Can Guo, "Decoherence of quantum registers", LANL preprint quant-ph/9703036 (March 20, 1997).						
	DZ	Lu-Ming Duan and Guan-Can Guo, "Cooperative loss and decoherence in quantum computation and communication", LANL preprint quant-ph/9701020 (Jan 16, 1997).						
	EA	Lu-Ming Duan and Guang-Can Guo, "Reducing decoherence in quantum computer memory with all quantum bits coupling to the same environment", LANL preprint quant-ph/9612003 (Feb. 2, 1998).						
	EB	C.B. Eom, A.F. Marshall et al., "Epitaxial and smooth films of a-axis YBaCuO", Science, 249:4976, 1549 (September 28, 1990).						
	EC	R. Fazio, G.M. Palma, and J. Siewert, "Fidelity and Leakage of Josephson Qubits", Phys. Rev. Lett. 83, 5385 (1999).						
	ED	D. Feder, A. Beardsall, A. Berlinsky, and C. Kallin, "Twin boundaries in d-wave superconductors", Phys. Rev. B, 56:10, R5751-R5754 (September 1, 1997).						
	EE	M.V. Feigel'man et al., "Andreev Spectroscopy for Superconducting Phase Qubits", LANL preprint cond-mat/9907317 (July 1999).						
	EF	R. Feynman, "Stimulating Physics with Computers", Int. Journal of Theoretical Phys., 21:6/7, 467-488 (1982).						
	EG	M. Fogelstrom, S. Yip, and J. Kurkijarvi, "Pinhole junctions in d-wave superconductors", LANL preprint cond-mat/9709120 (September 10, 1997).						
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E	EH	Christopher A. Fuchs, Nicolas Gisin, Robert B. Griffiths et al., "Optimal eavesdropping in quantum cryptography. I.", LANL preprint quant-ph/9701039 (Jan. 30, 1997).
	EI	A. Furusaki, "Josephson current carried by Andreev levels in superconducting quantum point Contacts" LANL preprint cond-mat/9811026 (1998).
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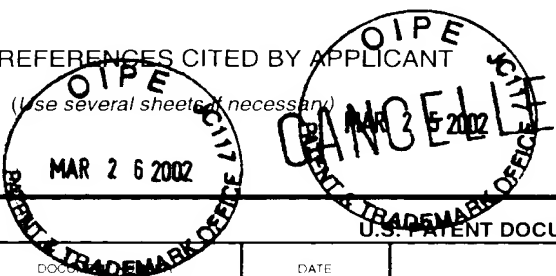
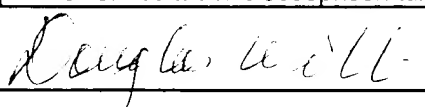
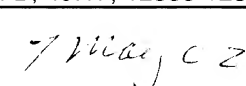
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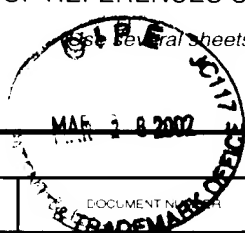
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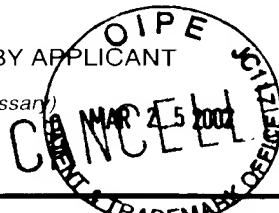
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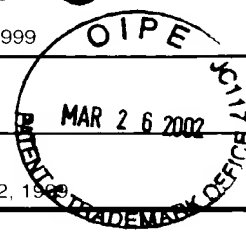
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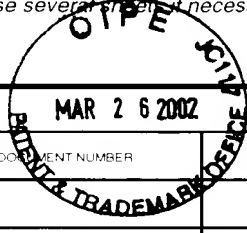

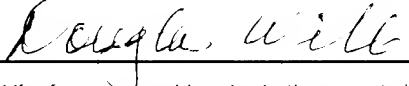
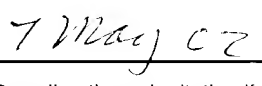
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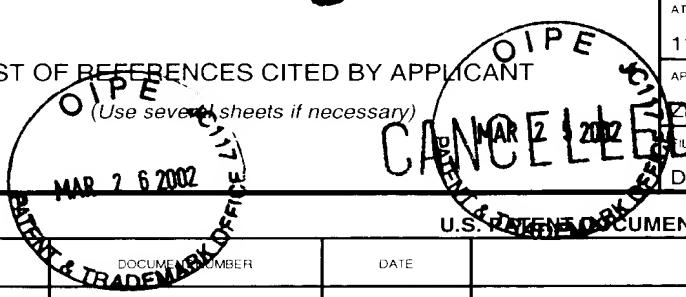

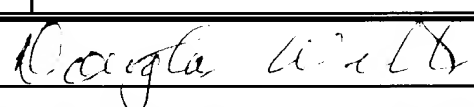
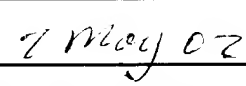
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